

What is claimed is:

- 1     1. A method of configuring communications over a network  
2       comprising:
  - 3              connecting a device to the network;
  - 4              receiving data on the device from the network;
  - 5              configuring the device for a communication mode,  
6       from a plurality of possible communication modes, wherein the  
7       communication mode includes transferring data between the  
8       device and the network simultaneously in time;  
9              transferring data between the device and the network  
10      based on the communication mode; and  
11              determining whether to retain the device in the  
12      communication mode.
- 1     2. The method of claim 1 further comprising,  
2              configuring the device for a communication mode,  
3       wherein the communication mode includes transferring data  
4       between the device and the network separately in time.
- 1     3. The method of claim 1, wherein communication mode further  
2       comprises a full-duplex mode.
- 1     4. The method of claim 1, wherein the network comprises an  
2       Ethernet network.

1       5.   The method of claim 1, wherein the device comprises a  
2       medium access controller.

1       6.   The method of claim 1, wherein the device comprises a  
2       switch.

1       7.   The method of claim 1, wherein the device comprises a  
2       hub.

1       8.   The method of claim 1, wherein the device comprises an  
2       Ethernet interface card.

1       9.   The method of claim 1, wherein the device comprises a  
2       computer.

1       10.   The method of claim 1, wherein the device comprises an  
2       Ethernet peripheral device.

1       11.   An apparatus configured to connect to a network, the  
2       apparatus comprising:

3                    a memory which stores instructions to,

4                    configure the apparatus for a communication

5       mode, from a plurality of possible communication modes,

6       wherein the communication mode includes transferring data

7       between the device and the network simultaneously in time,

8                    transfer data between the apparatus and the

9       network based on the communication mode,

10                   determine whether to retain the apparatus in  
11                   the communication mode; and  
12                   a processor which executes the instructions.

1       12. The apparatus of claim 11, wherein the instructions  
2       include configuring the apparatus for a communication mode,  
3       wherein the communication mode includes transferring data  
4       between the apparatus and the network separately in time.

1       13. The apparatus of claim 11, wherein the instructions  
2       include transferring data between the apparatus and the  
3       network in a full-duplex mode.

1       14. The apparatus of claim 11, wherein the network comprises  
2       an Ethernet network.

1       15. The apparatus of claim 11, wherein the apparatus is  
2       incorporated into a medium access controller.

1       16. The apparatus of claim 11, wherein the apparatus is  
2       incorporated into a switch.

1       17. The apparatus of claim 11, wherein the apparatus is  
2       incorporated into a hub.

1       18. The apparatus of claim 11, wherein the apparatus is  
2       incorporated into an Ethernet interface card.

1       19. The apparatus of claim 11, wherein the apparatus is  
2       incorporated into a computer.

1       20. The apparatus of claim 11, wherein the apparatus is  
2       incorporated into an Ethernet peripheral device.

1       21. An article comprising a machine-readable medium that  
2       stores instructions that cause a machine to:

3                  receive data from a connected network;

4                  configure the machine for a communication mode, from  
5       a plurality of possible communication modes, for transferring  
6       data between the machine and the network, wherein the  
7       communication mode includes transferring data between the  
8       machine and the network simultaneously in time;

9                  transfer data between the machine and the network  
10      based on the determined communication mode; and

11                 determine whether to retain the machine in the  
12      communication mode.

1       22. The machine-readable medium of claim 21, wherein the  
2       instructions further cause the machine to determine a  
3       communication mode, from the plurality of possible  
4       communication modes, wherein the communication mode includes  
5       transferring data between the machine and the network  
6       separately in time.

1       23. The machine-readable medium of claim 21, wherein the  
2       instructions further cause the machine to determine a  
3       communication mode, from the plurality of possible  
4       communication modes, wherein the communication mode includes  
5       transferring data between the machine and the network in a  
6       full-duplex mode.

1       24. The machine-readable medium of claim 21 is a random  
2       access memory.

1       25. The machine-readable medium of claim 21 is a read only  
2       memory.

1       26. The machine-readable medium of claim 21 is a hard disk  
2       drive.